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Dueck et al.

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(54) **BIOMASS GASIFICATION SYSTEM**

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See application file for complete search history.

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(57) **ABSTRACT**

A biomass gasification system for efficiently extracting heat energy from biomass material. The biomass gasification system includes a primary combustion chamber, a rotating grate within the primary combustion chamber for supporting the biomass during gasification, a feeder unit in communication with the primary combustion chamber for delivering biomass, a secondary combustion chamber fluidly connected to the primary combustion chamber, an oxygen mixer positioned between the primary combustion chamber and the secondary combustion chamber, a heat exchanger and an exhaust stack.

16 Claims, 10 Drawing Sheets

